

**THE CHURCH AT DEREĞİZİ:
A PRELIMINARY REPORT ON THE MOSAICS OF THE DIACONICON**

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IN May 1967 three small mosaic fragments were discovered in the diaconicon of the Byzantine church at Dereğizi, in southern Anatolia.¹ Of the mosaics which once decorated the half-dome of the apsidiole and the barrel vault of the adjacent chancel-like element, only these fragments remained. They rested against the cornice and extended from the northern section of the half-dome to the neighboring barrel vault (figs. A and B, 1 and 2).

The first fragment (I), a slightly concave triangular piece, occupied the northern section of the half-dome. Its base, supported by the cornice, measured 0.57 m.; its height, 0.51 m. Its western edge was located 0.125 m. from the west face of the half-dome.² The second fragment (II) occupied the face of the half-dome. A nondescript, flat patch, it extended 0.06 m. from the soffit of the adjacent barrel vault and rose to a height of 0.545 m. above the cornice. Set against this fragment was the third (III), a flat, L-shaped piece, which occupied the northern haunch of the barrel vault. Its base, supported by the cornice, extended 0.545 m. west of the face of the half-dome; its height measured 0.585 m.³

¹ For a brief discussion of these fragments and others found in 1967, see J. Morganstern, "The Church at Dereğizi: A Preliminary Report," *Dumbarton Oaks Papers*, 22 (1968), p. 217ff., esp. 222f., or *idem*, *Türk Arkeoloji Dergisi*, XVI, 2 (1967), p. 161ff., esp. 166f. A short note appears also in M. J. Mellink, "Archaeology in Asia Minor," *American Journal of Archaeology*, 73 (1969), p. 226.

² This measurement indicates the distance to the mosaic which decorated the west face of the half-dome, not the distance to the masonry of the west face. The measurements which follow are reckoned similarly.

³ In addition, scattered tesserae were found above the junction of fragment II and fragment III, continuing almost to the crown of the barrel vault. No tesserae were found on the southern haunch of the vault. The plaster preserved there was, however, identical to that

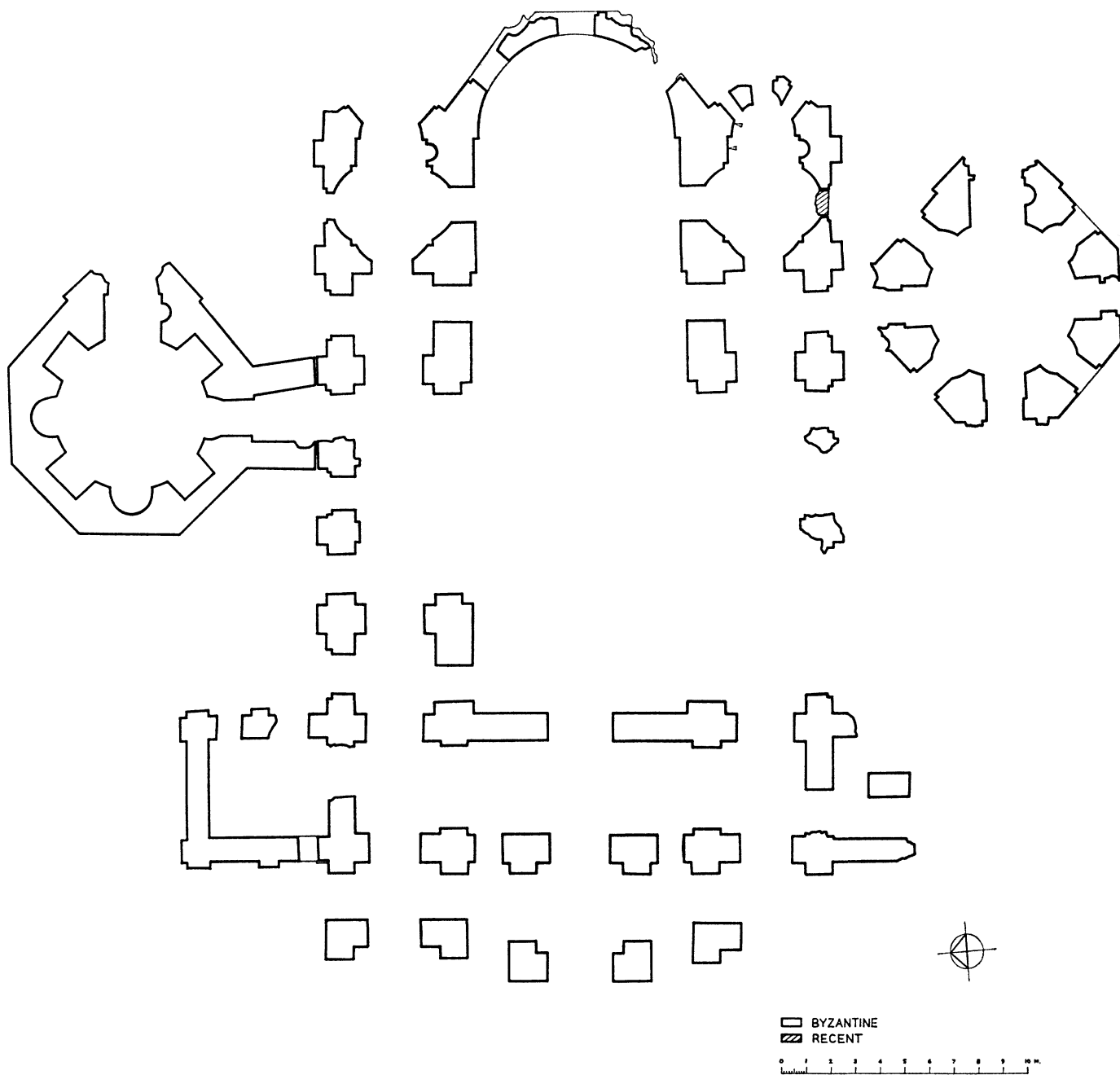
All three fragments were badly preserved. Large areas of tesserae had pulled away from the plaster setting-bed, and the two layers of plaster beneath the setting-bed were deeply rutted by rain water. Tesserae and exposed setting-bed alike were covered by a tough layer of blackened sinter, sometimes as thick as 0.5 mm.

In 1968, with the cooperation of the Turkish Department of Antiquities, the fragments were consolidated, cleaned, removed from the church, and transferred to the Antalya Museum.⁴ The present report attempts to discuss the findings made during the course of this work.⁵ It is limited to a found on the northern haunch, thus indicating that it too was decorated with mosaic. No evidence of tesserae was found west of the barrel vault.

⁴ The fragments were backed with plaster of Paris, reinforced with rust-proofed iron armatures. The curvatures and irregularities presented by the mosaics, when found, were preserved, and, wherever feasible, the original plaster was retained and incorporated into the new plaster backings. Because fragment III was set against fragment II, when discovered, these two fragments were removed from the church as a unit and mounted as a single unit. Fragment I, isolated when found, was mounted independently.

⁵ We are once again indebted to the American Research Institute in Turkey for financial support and to the Turkish Department of Antiquities for permission to undertake this work. We should like to thank particularly the Under Secretary for Cultural Affairs, Bay M. Önder, the Director General of the Department of Antiquities, Bay H. Gürçay, and Bay B. Tezcan for their kind assistance. In Antalya we were aided also by the Director of the Antalya Museum, Bay I. Ünal, and his assistants, and in Istanbul by Dr. N. Fırath of the Istanbul Archeological Museums and by Prof. D. Kuban of the Istanbul Technical University. For technical advice we are indebted also to Mr. E. J. W. Hawkins, Prof. L. Majewski, and Mr. D. C. Winfield, and for further assistance, to Prof. H. Buchthal and Prof. C. Mango.

The staff this year consisted of the writers and Mrs. Morganstern. The Department of



A. The Church at Dereagzi. Plan (revised) at Present Ground Level. Extent of Mosaics indicated by Two Arrows in Diaconicon

description of the fragments that remain and a preliminary investigation of their date. The problem of their date will be treated in detail in the final report, and questions of style and iconography will be discussed at that time.

DESCRIPTION OF THE MOSAICS

Fragment I (figs. 4 and 5)

Fragment I depicts part of the vision of Christ in Majesty, a theophany inspired by Isaiah 6, Ezekiel 1 and 10, Daniel 7:9, and Revelations 4.⁶ The left half of the fragment

Antiquities was represented by Bay A. Özgür. For a general summary of the campaign, see J. Morganstern and R. E. Stone, "The Church at Dereagzi: Second Preliminary Report", *Türk Arkeoloji Dergisi* (forthcoming).

⁶ This identification was first suggested to us, after preliminary cleaning by Dr. O. Feld and Herr U. Peschlow. On the subject of theophanies or visions of Christ in Majesty, see W. Neuss, *Das Buch Ezechiel in Theologie und Kunst bis zum Ende des 12. Jahrhunderts*, Beiträge zur Geschichte des alten Mönchtums und des Benediktinordens, XII, 1-2 (Münster, 1912); G. de Jerphanion, *Une nouvelle province de l'art byzantin. Les églises rupestres de Cappadoce* (Paris, 1925-1942), esp. I, 1, p. 69 ff.; *idem*, "Les noms des quatre animaux et le commentaire liturgique de pseudo-Germain," *La voix des monuments* (Paris, 1930), p. 250 ff.; F. van der Meer, *Maestas Domini—Théophanies de l'Apocalypse*, Studi di antichità cristiana, XIII (Rome, 1938), p. 255 ff. ("La théophanie du trisagion"); A. Grabar, *Martyrium. Recherches sur le culte des reliques et l'art chrétien antique*, II (Paris, 1946), p. 129 ff. ("Les images des théophanies dans les martyria des lieux saints") and p. 207 ff. ("Les théophanies-visions dans les absides des chapelles coptes"); *idem*, *L'iconoclasme byzantin. Dossier archéologique* (Paris, 1957), pp. 193 f., 213 f., 234, and 241 f.; C. Ihm, *Die Programme der Christlichen Apsismalerei vom Vierten Jahrhundert bis zur Mitte des Achten Jahrhunderts*, Forschungen zur Kunstgeschichte und Christlichen Archäologie, IV (Wiesbaden, 1960), p. 42 ff. ("Die liturgische Maestas"); A. Grabar, "Les sources des peintres byzantins des XIII^e-XIV^e siècles," *Cahiers archéologiques*, XII (1962), p. 363 ff. ("Nouvelles recherches sur l'icone bilatérale de Poganovo"); C. Mango, *Materials for the Study of the Mosaics of St. Sophia at Istanbul*, Dumbarton Oaks Studies, VIII (Washington, D.C., 1962), pp. 34 and 98; J. Lafontaine-Dosogne, "Théophanies-Visions auxquelles participent les prophètes dans l'art byzantin après la restauration des images," *Synthronon*, Bibliothèque des cahiers archéologiques, II (Paris, 1968), p. 135 ff.

is filled by a large wheel, surrounded by fire. Above the wheel are two letters of an inscription. To the right appears part of a cherub or seraph: his feet are visible at the base of the fragment; the two wings, which cover his legs, are indicated by the V-shaped area above.⁷ The area to the right of the cherub-seraph is filled with fire.

Of the wheel only the lower right half is preserved (diameter including outline: 0.32 m.). Five of the original eight spokes link the hub to the outer rim. The hub is indicated by a central light brown stone, surrounded by three concentric rings: the center ring is rendered by tessarae dipped in red lead paint;⁸ the others, by single rows of light tessarae. The spindle-shaped spokes consist of two converging rows of red dipped cubes, outlined by single rows of light tessarae. Sockets, rendered also by light cubes, fix the spokes to the rim. The rim itself is indicated by four concentric rings: a double row of large tannish brown stones, outlined by rows of light tessarae.

⁷ Because of the limited size of fragment I, it is uncertain whether the creature depicted is a cherub or a seraph. In those visions of Christ still preserved, examples of both can be found. In the Old Testament cherubim are mentioned in Ezekiel, and seraphim in Isaiah.

⁸ Cubes dipped in paint occur only in fragment I in parts of the wheel and in all areas of fire. The majority of the tessarae dipped in paint are fine-grained white marble and grey and white Proconnesian marble. Cream, tan, and Iassos red marble, tannish brown stone, apple green glass, pale turquoise glass, dark grey slate, and terracotta are also used, but less frequently.

When fragment I was cleaned and examined in 1968 very little of the original paint still covered the dipped cubes. Only a few tessarae preserved as much as half of their paint, and most showed only traces of it. The former tessarae we left as we found them. The latter were repainted with red lead pigment, identical in color to that originally employed; the vehicle used was poly-vinyl acetate resin and toluene.

On the use of dipped tessarae in other Byzantine monuments, see C. Mango and E. J. W. Hawkins, "The Apse Mosaics of St. Sophia at Istanbul. Report on Work Carried out in 1964," *Dumbarton Oaks Papers*, 19 (1965), pp. 119 note 9 and 138 note 31, and E. J. W. Hawkins, "Further Observations on the Narthex Mosaic in St. Sophia at Istanbul," *op. cit.*, 22 (1968), pp. 154 note 6 and 164 ff.

The almond-shaped areas between the spokes of the wheel apparently are part of the background. They will be discussed below.

The light tessarae used throughout the wheel consist primarily of white and grey Proconnesian marble, fine-grained white, cream, tannish cream, tan, pink, and Iassos red marble, and light brown stone. Sprinkled among these tessarae are occasional cubes of red-orange, yellow, pale turquoise, pale and medium grey-green, orange-brown, and red-brown glass, light and dark grey slate, tannish brown stone, terracotta, and some cubes dipped in red lead paint.

The wheel is surrounded by fire. To the right burns a large patch of flames (total width: 0.09 m.; total height: 0.23 m.). The flames are rendered by cubes dipped in red lead paint and separated by single rows of light tessarae. The plaster setting-bed may have been painted red.

Beneath the wheel along the base of the fragment burn four more flames. That to the left is only partially preserved. These flames are rendered by concentric loops of tessarae, of which only the core or one of the inner loops is delineated by red dipped cubes. The remaining loops consist of primarily light tessarae.

Above the wheel, surrounding the inscription, appear additional red dipped tessarae. They presumably indicate another patch of fire.

The ragged area along the right edge of the fragment is crowded also with fire. A small, damaged patch of flames appears above the left foot of the cherub-seraph. Like the flames to the right of the wheel, these also are rendered entirely by cubes dipped in red lead paint and separated by single rows of light tessarae.

Between the left foot of the cherub-seraph and the edge of the fragment are two more flames. That to the right is badly damaged. These flames, like those beneath the wheel, are formed by concentric loops of tessarae, of which only the core or one of the inner loops is delineated by red dipped cubes. The remaining loops are composed of light tessarae.

The similarity of the solid patches of fire and the lighter flames on either side of the cherub-seraph has already been noted. The

fire to his right is conceived in direct relation to the wheel depicted there, and at least the solid patch of flames to the right of the wheel stems from it. The fire to his left, we suspect, was conceived, likewise, in relation to a second wheel, from which the damaged patch of flames above his left foot once stemmed. The cherub-seraph would, thus, have been flanked by two wheels, one to the right and one to the left. A similar arrangement appears at Dodo (Georgia) in the cave church of David-Garedža.⁹

Between the feet of the cherub-seraph appears one more flame. Unlike the other flames along the base of the fragment, it is rendered entirely by red dipped cubes.

The tessarae used to separate the solid patches of fire and to delineate the light flames along the base of the fragment resemble closely the light cubes used throughout the wheel. Marble and stone again predominate, with an occasional sprinkling of glass, slate, and terracotta. Several cubes, however, do appear for the first time: white limestone, grey marble, light yellow-green, light green, turquoise, pale olive, and yellow-brown glass, olive and medium grey slate, and dark blue-grey stone.

The feet of the cherub-seraph are seen from above (length of right foot: 0.12 m.; length of left foot: 0.125 m.). The toes are badly damaged, and the outer edge of each foot is also disturbed. The instep is indicated by two rows of small red-brown glass tessarae;

⁹ Š. J. Amiranašvili, *Istorija gruzinskoj monumental'noj živopisi*, I (Tbilisi, 1957), p. 30 ff., pls. 17-23, dates the painting of the apse seventh to eighth century. V. Lazarev, *Storia della pittura bizantina* (Turin, 1967), pp. 167, and 182 note 127, dates it in the ninth century. In the apse of the monastery church of Lmbat (Armenia) and in the Pantokrator vault of the south gallery of St. Sophia in Istanbul the cherubim are flanked by two wheels on each side. On the paintings at Lmbat (early seventh century), see J. Strzygowski, *Die Baukunst der Armenier und Europa*, II (Vienna, 1918), p. 498 f. and fig. 530; L. A. Durnovo, *Kratkaja istorija drevnearmjanskoj živopisi* (Erevan, 1957), p. 9 f., frontispiece, and pl. 1; S. Der Nersessian, "La peinture arménienne au VII^e siècle et les miniatures de l'évangile d'Etchmiadzin," *Actes du XII^e Congrès International d'Etudes Byzantines* (Ohrid, 1961), III (Belgrade, 1964), p. 49 ff. On the mosaics in St. Sophia (late ninth or early tenth century), C. Mango, *op. cit.*, p. 29 ff. and figs. 29-35.

the toes by tesserae of red-brown and black glass. The flesh is rendered by small cubes of cream and pink marble.¹⁰ Both feet are outlined by a single row of light marbles, consisting of white and grey Proconnesian, fine-grained white, grey, cream, tan, and pink.¹¹

The lower portion of the cherub-seraph's body is indicated by the pale V-shaped area directly above his feet (height above feet: 0.36 m.). Of his legs nothing is seen, and given the size and present condition of fragment I, it is difficult to distinguish more than the general outline of the two wings which seem to cover them.¹²

The wings are rendered primarily by light tesserae. Marble predominates, but glasses, such as opaque bright red, light green, apple green, emerald green, pale sea green, pale and medium turquoise, pale blue, black, medium and dark olive, and brown, are also prominent. The use of slate, terracotta, and cubes dipped in red paint is limited.

Of the inscription above the wheel only two letters survive: an Ε (height: 0.075 m.) and a Λ (present height: 0.06 m.).¹³ The inscription is confined above and to the left by areas of loss, and to the right by the wing of the cherub-seraph. It may have begun above the two remaining letters or to the left; or it may have continued to the right, beyond the cherub-seraph. The letters are indicated in tesserae of fine-grained white marble. The background is varied: the Ε and the Λ are either filled or surrounded by red dipped cubes; the remaining areas are set with tesserae of white and grey Proconnesian marble, cream and Iassos red marble, light

brown stone, light grey slate, and pale and medium sea green glass.

The content of the inscription is uncertain. A survey of the inscriptions found in similar representations suggests several possibilities, yet of these none appears near or refers to the outer wheel, the fire, or the cherub-seraph. A more likely possibility is, perhaps, [ΓΕΛ Γ]ΕΛ (or [Γ]ΕΛ cherub-seraph [ΓΕΛ] or [Γ]ΕΛ), the Hebrew word meaning "wheel", found in the text of the Septuagint (Ezekiel

ΓΕΛ 10:13).¹⁴ The expression ΓΕΛ does occur in ΓΕΛ

the theophany in the apse of Chapel 15a at Göreme, yet, curiously, on the staff of the archangel Gabriel.¹⁵ And, in the south-

¹⁴ The text, in fact, reads τοῖς δὲ τροχοῖς τούτοις ἐπεκλήθη Γεγγέλ ἀκούοντός μου (ed. A. Rahlfs, *Septuaginta*, 3rd ed., II [Stuttgart, 1949], p. 783). Elsewhere in the Old Testament some form of ὁ τροχός is used, and in the paintings of Cappadocia we find ΟΙ ΤΡΟΧΟΙ in Haçlı Kilise in the valley of Kızıl Çukur, Η ΤΡΟΧΥ in Tokalı Kilise phase 3 (New Church) at Göreme and in the chapel of St. Barbara (Tahtalı Kilise) at Soğanlı, and Η ΤΡΟΧΥ in the chapel of St. Eustathios at Göreme. On Haçlı Kilise, see N. and M. Thierry, "Haçlı Kilise, l'église à la croix en Cappadoce," *Journal des savants* (1964), p. 251 ff. and figs. 5-7. On Tokalı Kilise phase 3, G. de Jerphanion, *Une nouvelle province* (supra, note 6) I, 2 (1932), p. 322 ff. and Album II (1928), pl. 70 and 84(1); M. Restle, *Die Byzantinische Wandmalerei in Kleinasien*, II (Recklinghausen, 1967), Taf. 61 and 121-123; R. Cormack, "Byzantine Cappadocia: The Archaic Group of Wall-Paintings," *Journal of the British Archaeological Association*, 3rd Ser., XXX (1967), p. 27 ff. On the chapel of St. Barbara, see Jerphanion, *op. cit.*, II, 1 (1936), p. 313 and Album III (1934), pl. 186 (1, 2), 187 (1), 191 (3, 4); M. Restle, *op. cit.*, III, Taf. 433-434. On the chapel of St. Eustathios, see Jerphanion, *op. cit.*, I, 1 (1925), p. 149 f. and Album I (1925), pl. 36 (1); M. Restle, *op. cit.*, II, Taf. 134 and 146; J. Lafontaine-Dosogne, "Nouvelles notes cappadociennes," *Byzantion*, XXXIII (1963), p. 127 f.

¹⁵ For a philological explanation of the expression in Chapel 15a, see G. P. Schiemenz, "Verschollene Malereien in Göreme: Die 'archaische Kapelle bei Elmalı Kilise' und die Muttergottes zwischen Engeln," *Orientalia Christiana Periodica*, XXXIV, fasc. 1 (1968), p. 79 ff. For a discussion of the chapel and its wall paintings, see *ibid.*, p. 70 ff., and N. Thierry, "Quelques églises inédites en Cappadoce," *Journal des savants* (1965), p. 625 ff. and fig. 1.

¹⁰ A single cube of red-brown glass occurs also near the ridge of the left foot.

¹¹ Included also are single cubes of red-orange and red-brown glass.

¹² The three short vertical strips of pale sea green, pale turquoise, turquoise, and pale blue glass located near the vertical axis of the V-shaped area may indicate the division between the two wings, but one cannot be certain.

¹³ The long white vertical strip between the Ε and the Λ is apparently part of the background, not the inscription. It is too long to be an accent or a breathing, and too close to the Λ to be an Ι. In addition, the cubes which comprise it are all white and grey Proconnesian marble; those of the Ε and Λ, it will be seen, are fine-grained white marble.

east pendentive of Asağı bağı Kilise (Cambazlı Kilise) at Ortahisar, above the middle right wing of the seraph, the letters ... ΓΕΛ ... appear.¹⁶ If the latter inscription can, in fact, be read [ΓΕΛ] ΓΕΛ (or ΓΕΛ cherub-seraph [ΓΕΛ]), its relationship to a group such as that from Dereğizi may be relevant.

The background against which the theophany is set is seldom visible. As noted above, it appears between the spokes of the wheel. It occurs also beneath the wheel, below the inscription, to the right of the Λ, and below the two patches of fire flanking the cherub-seraph. These areas are all rendered by green, turquoise, or blue glass. The tesserae used include the following: yellow-green, light and medium green, apple green, emerald green, pale and medium sea green, pale and medium grey-green, pale and medium turquoise, and pale and dark blue.¹⁷

A band of unset plaster, ca. 0.025–0.03 m. in height, originally separated the tesserae of fragment I from the cornice of the apsidiole. When examined in 1968 it revealed no traces of paint.

Fragment II (fig. 3)

So little of fragment II is preserved today that it is difficult to determine precisely what is represented. All that remains is a thin,

¹⁶ See G. P. Schiemenz, *op. cit.*, p. 80 note 1 and Abb. 12, and N. and M. Thierry, "Une nouvelle église rupestre de Cappadoce: Cambazlı Kilise à Ortahisar," *Journal des savants* (1963), p. 5ff., esp. 10f., and fig. 3. The Thierrys prefer the reading [ΑΓ]ΓΕΛ[ΟC]. We have not seen the inscription, which is apparently destroyed before the Γ and after the Λ, and have had to rely on the discussions and photographs of the Thierrys and Schiemenz.

A third example proposed by Schiemenz (*op. cit.*, p. 80 and Abb. 11) is less convincing. It appears, he suggests, on the staff of the archangel Gabriel in the apse of Kırk dam altı Kilise at Belisrama. On this church, see N. and M. Thierry, *Nouvelles églises de Cappadoce. Région du Hasan Dağı* (Paris, 1963), p. 201ff. and pl. 96a, and V. Laurent, "L'inscription de l'église Saint-Georges de Bélisrama," *Revue des études byzantines*, XXVI (1968), p. 367ff.

¹⁷ The center of each almond-shaped area between the spokes of the wheel is set also with a single cube of white or grey Proconnesian marble, fine-grained white marble, or light brown stone.

tendril-like element, set against a plain background. Whether the tendril-like element is a vine, as we suspect, or merely a decorative motif is unclear.¹⁸ It is indicated by tesserae of light, medium, and dark green, apple green, pale and medium turquoise, pale and dark blue, and pale grey-green glass.

The background consists of fine-grained white marble cubes, which outline the tendril-like element and fill the remaining areas in generally vertical rows.¹⁹

Fragment III (figs. 6 and 7)

Fragment III reveals the lower portion of a handsomely modeled male figure, clad in tunic and sandals and set against a plain background. The figure starts forward to his left. His identity is uncertain. His antique costume suggests he is an Old or New Testament figure.²⁰ His animated stance, however, suggests he may participate in the vision to his left. In this case he may be an angel,²¹ possibly the archangel

¹⁸ In spite of the present condition of the fragment, it may be possible to distinguish the beginnings of two small branches or shoots near the top of the tendril-like element: the upper one to the right, the lower one to the left.

¹⁹ The largest area of background is enlivened by a single turquoise tessera near its center.

²⁰ M. van Berchem and E. Clouzot, *Mosaïques chrétiennes du IV^{me} au X^{me} siècle* (Geneva, 1924), p. xlvii ff. Cases do exist where a saint or martyr is dressed in tunic (and pallium) and sandals, as, for example, St. Maurus in the apse of the basilica Eufrasiana at Poreč (B. Molajoli, *La Basilica Eufrasiana di Parenzo* [Padua, 1943], p. 41 and fig. 52), the martyrs represented in the nave of S. Apollinare Nuovo at Ravenna (F. W. Deichmann, *Frühchristliche Bauten und Mosaiken von Ravenna* [Baden-Baden, 1958], Taf. 99, 105–107, and 120–124), or St. Anastasius on the triumphal arch of the Oratory of S. Venanzio in Rome (M. van Berchem and E. Clouzot, *op. cit.*, p. 202 and fig. 252). These examples and all similar examples known to us are, however, confined to the Italian peninsula and Istria.

²¹ See, for example, the painting in the apse of the church of the Holy Apostles or Pentecost at Sinassos (Mustafa Paşa Köy) or that of Chapel XVII at Bawit. On the first, see G. de Jerphanion, *op. cit.*, II, 1 (1936), p. 63ff. and Album III (1934), pl. 150 and 151 (1), and M. Restle, *op. cit.*, III, Taf. 403; on the second, J. Clédat, *La monastère et la nécropole de Baouît*, Institut Français d'Archéologie Orientale du Caire, Mémoires, XII (Cairo, 1904),

Michael,²³ or a prophet, Isaiah or even Ezekiel.²³

Of his tunic only that portion which covers the lower part of the left leg is preserved. The fluted garment is engaged by the left knee, which bends slightly against it. Its outer edge and hem are delineated by single rows of transparent amber or greenish brown glass (height of edge of tunic: 0.19 m.; length of hem: 0.20 m.). The shadows are modeled by one row of apple green glass and a second row of light green glass, and the high lights are indicated by one or two rows of fine-grained marble and a single row of transparent amber or greenish brown glass. That part of the garment still preserved is disturbed by several areas of loss. All that remains directly above the left leg is a large

p. 75f. and pls. XL-XLIII. As it happens, none of these angels wears sandals; most angels in antique dress, however, do, as in the north apse of Ayvalı Kilise in the Güllü Dere (N. and M. Thierry, "Ayvalı Kilise ou pigeonier de Güllü Dere, église inédite de Cappadoce," *Cahiers archéologiques*, XV [1965], p. 132f. and figs. 23-25, 27, and 31).

²² In those representations of Christ in Majesty still preserved, the archangel Michael is usually represented to the left of Christ and sometimes in antique dress, as in the south apse of Ayvalı Kilise (N. and M. Thierry, *ibid.*, p. 116f. and fig. 12), or without sandals, as in Chapel VI at Bawit (J. Maspero, ed. E. Drioton, *Fouilles exécutées à Baouît*, Institut Français d'Archéologie Orientale du Caire, Mémoires, LIX, 2 [Cairo, 1943], pp. vii and 6 and pls. XXI-XXIV). In the chapel of St. Eustathios at Göreme (see note 14 *supra*) the archangel Gabriel appears to the left of Christ, but this is most unusual. Gabriel, in this case, is not dressed in antique costume.

²³ On the prophets in representations of Christ in Majesty, see N. and M. Thierry, *op. cit.* (*supra*, note 21), p. 116 note 44, pp. 116f. and 132f. and figs. 12, 23-25, 27, and 31, and J. Lafontaine-Dosogne, "Théophanies-Visions" (*supra*, note 6), p. 135ff., esp. 138ff. Isaiah usually appears to the left of Christ. In the apse of the south arm at Tağar and in the apse of the monastery church of Thari (Rhodes), however, Ezekiel is found to the left of Christ. On Tağar, see G. de Jerphanion, *op. cit.*, II, 1 (1936), p. 194f., and M. Restle, *op. cit.*, I, p. 55f. and II, Taf. 371; on the church at Thari, P. Lojacono, "Pitture parietali bizantine rodiate," *Studi bizantini e neoellenici*, VIII = *Atti dello VIII Congresso Internazionale di Studi Bizantini* (Palermo, 1951), II (Rome, 1953), p. 177 and fig. 2.

piece of dark grey slate, surrounded by an area of unset plaster, and to the left, a few tesserae of fine-grained white marble and apple green, pale blue, and transparent amber glass. Above the knee none of the tunic is preserved.

Scattered along the top of the fragment, beyond the edge of the tunic, are several isolated tesserae: light green, pale turquoise, and pale blue glasses with single cubes of tannish cream and Iassos red marble. They may form part of the pallium which probably originally covered the upper portion of the tunic.

The figure's boldly modeled left foot is seen in profile (length: 0.13 m.) and somewhat from above. It is sandaled. The sole, heel, anklet, and thongs of the sandal are rendered by a single row of relatively small cubes, primarily opaque bright red and red-brown glass.²⁴ The instep and heel of the foot are outlined by one or two rows; the toes and shin, by one row of relatively small tesserae of red-brown glass.²⁵ The areas of flesh are rendered by small pink and tannish cream marble tesserae. Below the ridge of the foot, a single cube of pale grey-green glass is also introduced, possibly to suggest a shadow.

The right foot, of which only the lower half is preserved, is shown poised in three-quarter view (preserved length: 0.085 m.), also from above. It too is sandaled. Due to the angle at which the foot is turned and to the state of its preservation, however, only the sole of the sandal is visible. This is indicated by a single row of red-brown glass tesserae. The outside edge of the foot and the four small toes are indicated primarily by small cubes of red-brown glass;²⁶ the big toe apparently remained unset. The flesh is

²⁴ The cubes of opaque bright red are confined to the sole, heel, and anklet of the sandal. Part of the thong above the ridge of the foot is indicated also by cubes of red-purple glass, and the outline of the sole is interrupted by a single tessera of pink marble.

²⁵ One tessera of orange-brown glass is also included in the outline of the shin; one of dark brown glass, in the outline of the toes. Several of the small toes are surrounded by areas of unset plaster.

²⁶ Scattered among these tesserae are two cubes of opaque bright red and one of purple-brown glass.

rendered by two rows of small pink and one row of small tannish cream marble tessarae, and a single tessara of apple green glass is inserted near the ridge of the foot. The inside edge of the foot is outlined, in turn, by one row of white Proconnesian marble and fine-grained white marble, which includes a long cube of dark grey slate (possibly, part of the thong), and the sole of the sandal is outlined by a row of tannish cream and pink marble.²⁷

The background against which the figure is set is rendered by tessarae of apple green glass with a sprinkling of turquoise glass (maximum width of background: 0.415 m.; maximum height: 0.52 m.). The figure is, for the most part, outlined by a single row of apple green glass, and the remaining areas are filled by wavy lines of tessarae, usually horizontal, but frequently sloping. The front and the sole of the sandal of the left foot are, however, not outlined, but confronted directly by several rows of horizontal cubes, which make only the slightest effort to accommodate the sandal. The setting-bed of the background is painted pale green.

A band of unset plaster 0.04–0.05 m. high, probably painted red-purple or red-brown, originally separated the apple green tessarae from the cornice. At the far left edge of the fragment the painted area extended as much as 0.09 m. above the cornice.²⁸

Reconstruction

From the preceding discussion it is now possible to present a preliminary reconstruction of the mosaics of the diaconicon.

The half-dome of the apsidiole was decorated with a vision of Christ in Majesty. Its northern section was occupied by a cherub or seraph, flanked probably by two wheels surrounded by fire (minimum arc of northern section, including proposed second wheel: ca. 0.99 m.). At least one of the wheels may have been labeled Γελαγελ. A corresponding representation presumably filled the southern section of the half-dome. Its eastern section was occupied, as usual, by an enthroned

Christ, enclosed probably in a mandorla (maximum arc of eastern section: ca. 1.915 m.).

The west face of the half-dome was filled by a tendril-like element, possibly a vine.

The barrel vault of the adjacent chancel-like space was decorated probably by four standing figures. The eastern portion of the northern haunch was occupied by a male figure, dressed in a tunic, possibly a pallium, and sandals (minimum width of eastern portion: 0.415 m.). It is uncertain precisely who this figure is. Presumably he is an Old or New Testament figure. He may even be an active participant in the vision: an angel, possibly the archangel Michael, or a prophet, Isaiah or Ezekiel. The western portion of the same haunch was filled probably by another figure (maximum width of western portion: ca. 0.61 m.), and the southern haunch, by two corresponding figures.

The Tessarae

The tessarae of fragment I consist of glass, stone, terracotta, and cubes dipped in paint. Those of fragment II and fragment III are glass and stone.

The tessarae of fragment I include:

glass: opaque bright red, red-orange, yellow, yellow-green (light and medium), green (light and medium), apple green, emerald green, sea green (pale and medium), turquoise (pale and medium), blue (pale and dark), black, olive (pale, medium, and dark), grey-green (pale and medium), transparent amber or greenish brown, yellow-brown, orange-brown, red-brown, and brown

stone: white limestone, white Proconnesian marble, grey Proconnesian marble, fine-grained white marble, grey marble, cream marble, tannish cream marble, tan marble, pink marble, Iassos red marble, light brown stone, tannish brown stone, dark blue-grey stone, grey slate (light, medium, and dark), olive slate, and red-purple slate

terracotta

cubes dipped in paint: red lead (red-orange).

²⁷ Included in the outline of the sole is also a single tessara of purple-brown glass.

²⁸ A large area of painted plaster is also preserved beneath and in front of the figure's right foot.

The tessarae of fragment II include:

glass: green (light, medium, and dark), apple green, turquoise (pale and medium), blue (pale and dark), and pale grey-green

stone: fine-grained white marble.

The tessarae of fragment III include:

glass: opaque bright red, light green, apple green, turquoise (pale and medium), pale blue, black, pale grey-green, transparent amber or greenish brown, orange-brown, red-brown, purple-brown, dark brown, and red-purple

stone: white Proconnesian marble, fine-grained white marble, tannish cream marble, pink marble, Iassos red marble, and dark grey slate.

Of the glass and stone tessarae used in fragment II, all but dark green glass appear in fragment I; of those employed in fragment III, all except purple-brown, dark brown, and red-purple.

The generally irregular tessarae are, for the most part, either small or medium-sized.²⁹ The small cubes (usually 4.0–7.0 mm.) are reserved primarily for the feet of the cherub-seraph (fragment I) and the feet of the figure (fragment III).³⁰ The more common medium-sized cubes (6.0–10.0 mm.) appear in all three fragments.³¹

²⁹ A few very large cubes, one or both sides of which may measure more than 10.0 mm., do occur. Such cubes, found for example in the rim of the wheel (fragment I), are, however, exceptional.

³⁰ Eight cubes from the right foot of the cherub-seraph (fragment I) measure as follows: 4.0 × 6.0, 6.0 × 6.0, 4.0 × 7.0, 6.0 × 7.0, 5.0 × 5.0, 5.0 × 7.0, 4.5 × 6.0, and 3.5 × 4.0 mm. Eight from the left foot of the figure (fragment III): 5.0 × 6.0, 4.0 × 6.0, 4.0 × 10.0, 10.0 × 10.0, 7.0 × 9.0, 4.0 × 6.0, 4.0 × 5.0, and 4.0 × 4.0 mm.

³¹ Eight cubes from the large patch of fire to the right of the wheel (fragment I) measure as follows: 7.5 × 9.0, 8.0 × 8.0, 7.0 × 8.0, 6.0 × 7.0, 7.0 × 10.0, 7.0 × 9.0, 9.5 × 10.0, and 7.0 × 8.0 mm. Eight from the tunic of the figure (fragment III): 7.0 × 10.0, 9.0 × 10.0, 10.0 × 10.0, 6.0 × 10.0, 5.0 × 7.0, 8.0 × 9.0, 9.0 × 10.0, and 8.0 × 10.0 mm. Eight from the background behind the figure (fragment III): 9.0 × 10.0, 6.0 × 8.0, 9.0 × 10.0, 7.0 × 8.0, 7.0 × 8.0, 7.0 × 8.0, 7.0 × 8.0, and 6.0 × 8.0 mm. The tessarae used to render the tendril-like element (fragment II) were not measured, but correspond closely to those of the tunic (fragment III).

Most tessarae are separated by large areas of plaster setting-bed and generally extend at least 1.0 mm. beyond the surface of the plaster.

The Plaster

The lime plaster beneath the tessarae of each fragment is, as usual, composed of three layers.³² The corresponding layers of each fragment are identical. The "rough-coat"—the initial coat of plaster—consists of straw, crushed brick, and lime. Coarse in texture and pinkish cream in color, it averages between 2.0–3.0 cm. in thickness. The second layer contains straw and lime, but no crushed brick.³³ It is coarse, yet creamy-white in color, and measures between 1.0–1.5 cm. in thickness. The setting-bed—the layer of plaster into which the tessarae are pressed—consists of lime and probably some marble dust. Fine in texture and creamy white in color, it measures approximately 1.0 cm. in thickness.

In preparation for the next layer of plaster the "rough-coat" and the second layer of each fragment were both worked when still wet. The "rough-coat" was keyed with the tip of a pointed trowel. The second layer was scored, with the edge of a trowel, in a herringbone pattern.

DATE OF THE MOSAICS

Study of the fragments, their tessarae, and the plaster beneath them suggests that all the mosaics of the diaconicon are contemporary.

The feet of the cherub-seraph in fragment I and the right foot of the figure in fragment III are strikingly similar. Each foot, seen from above, is rendered by predominantly small tessarae. The toes and one of the two edges are delineated by cubes of dark glass, primarily red-brown in color; the flesh is modeled by cubes of marble, pink and tannish cream or cream. Each foot is outlined by medium-sized tessarae, usually of light marble.

³² The total thickness of the three layers of plaster, in each fragment, averages between 4.0–5.0 cm.

³³ The second layer may contain less straw than the "rough-coat."

The tesserae of the three fragments, as we have just seen, are quite similar, and the corresponding layers of lime plaster, identical.

The relationship of the fragments to each other and the appearance of the vaults beneath them also suggests that the mosaics were executed during one campaign.

In 1968 the joint between fragment II and fragment III was still preserved (fig. B). It clarifies considerably the relationship between the two fragments.

The "rough-coat" of both these fragments was applied directly to the surface of the vaults and, when still wet, keyed to receive a second layer of plaster. The "rough-coat" of fragment II extends slightly behind that of fragment III, suggesting that the "rough-coat" of the west face of the half-dome may have been completed before that of the barrel vault was begun. Little time, however, seems to have elapsed between these two operations. The masonry surface of the barrel vault beneath fragment III reveals no evidence of additional plaster, no paint or lime wash, and no sign of soot.

Following the application of the "rough-coat" to both vaults, the second layer and the setting-bed were added to the west face of the half-dome, and the tesserae pressed into place.³⁴ These two layers cover the "rough-coat" of fragment III by more than 2.0 cm., thus proving that the "rough-coat" of the barrel vault was, in fact, completed before the second layer and the setting-bed of the west face were begun. On the other hand, the tesserae of fragment II stop abruptly 2.0–2.5 cm. from the "rough-coat" of fragment III. This suggests that the decoration of the barrel vault had already been planned when that of the west face of the half-dome was executed.³⁵ The absence of soot on the "rough-

coat" of fragment III supports the contention that the barrel vault was exposed only briefly before receiving its two final layers of plaster.³⁶

The application of the second layer and the setting-bed to the barrel vault and the insertion of the tesserae constitute the final stages of the campaign.³⁷ Of this there can be no question: the two layers of fragment III completely cover the bare strip, 2.0–2.5 cm. wide, at the edge of fragment II, and several of the tesserae overlap those of fragment II.

Unfortunately the junction between fragment I and fragment II was already disturbed by 1967 (fig. B). The masonry of the half-dome and its west face, however, is clean. There is no evidence of additional plaster, no sign of paint or limewash, and no accumulation of soot beneath either fragment. This also suggests that the mosaics of the two vaults are contemporary.

The mosaics are probably also contemporary with the construction of the church.³⁸ The fact that the masonry surface of the vaults is clean supports such a contention. So does the appearance of the three fragments. Not one of them shows any sign of repair: the plaster was apparently never patched, and the tesserae have not been reset.

While it is still somewhat premature to say precisely when the mosaics of the diaconicon were designed and when the church was built, it is possible to begin the discussion.

The settlement at Dereğzi was not a remote outpost. It was situated only twenty to twenty-five km. northwest of Myra, the seat of the metropolitan of Lycia, and linked to the important coastal city by road.³⁹

Thus, the fact that a vision of Christ was depicted in the diaconicon of the church is particularly significant. In a community as accessible as the settlement at Dereğzi, such

³⁴ The second layer, it will be remembered (see *supra*), was scored before the setting-bed was applied.

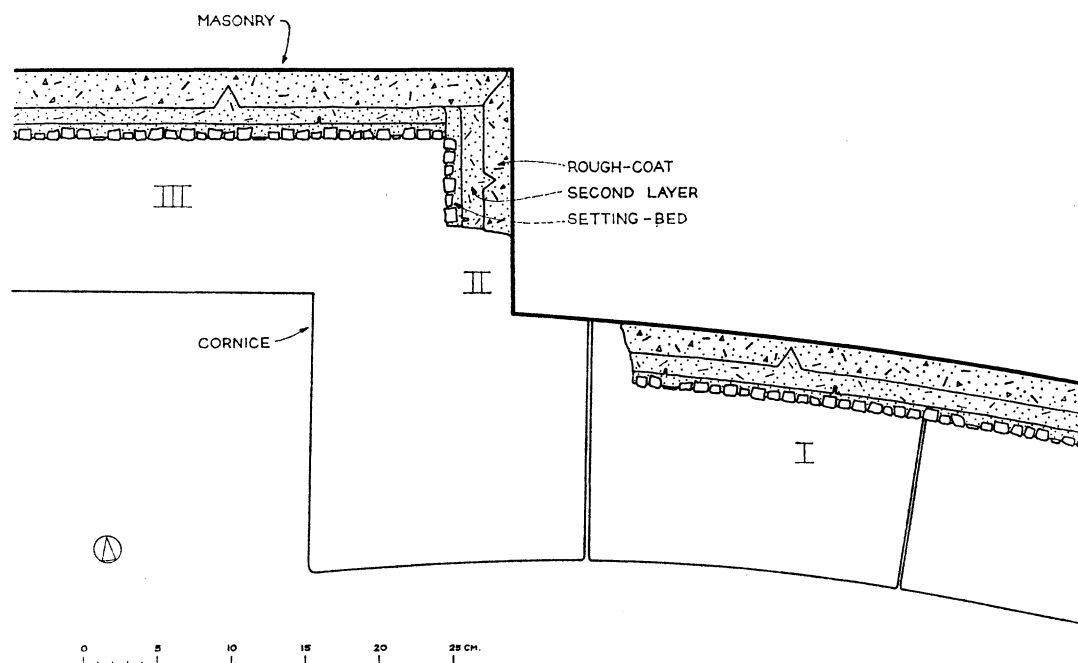
³⁵ The bare strip along the northern edge of fragment II is marked by several vertical slashes, made with the edge or tip of a trowel when the plaster was still wet. The intention of the mosaicist was presumably to provide a rough surface, against which the two final layers of plaster of fragment III could be set. This detail also suggests that the two mosaics were planned at the same time.

³⁶ The bare "rough-coat" of the barrel vault with its trowel-tip key marks would not have been particularly attractive. It seems unlikely that it would have been exposed for very long.

³⁷ See note 34 *supra*.

³⁸ We shall return to this problem in the final report.

³⁹ For a brief discussion of the settlement at Dereğzi and the road leading to Myra, see J. Morganstern, "The Church at Dereğzi" (*supra*, note 1), p. 223f. and figs. B and 8.



B. The Church at Dereagzi, Diaconicon, North Wall. Detailed Plan of Junction of Apsidiole and Adjacent Chancel-like Element, showing Relationship of Fragments I, II, and III

a representation would have been unthinkable during either the first period of Iconoclasm (726–787) or the second (815–843).⁴⁰ The period between 787–815 seems equally unlikely.⁴¹ The reaction of the Iconodules then was quite feeble: the decoration of

⁴⁰ On the period of Iconoclasm, see A. Grabar, *L'iconoclasme byzantin* (*supra*, note 6); J. Gouillard in *Revue des études byzantines*, XVI (1958), p. 261ff.; C. Mango, *The Brazen House. A Study of the Vestibule of the Imperial Palace of Constantinople*, Arkæologisk-kunsthistoriske Meddelelser, Bind 4, nr. 4 (Copenhagen, 1959), pp. 112ff. and 170ff. On the position of the metropolitan of Myra during this period, see M. Le Quien, *Oriens Christianus*, I (Paris, 1740), col. 969.

⁴¹ On the period from 787–815, see A. Grabar, "L'esthétisme d'un théologien humaniste byzantin du IX^e siècle," *Mélanges en l'honneur de Monseigneur Michel Andrieu* (Strasbourg, 1956), p. 189ff.; *idem*, *L'iconoclasme byzantin* (*supra*, note 6), pp. 126, 130, 137 note 1, 153f., 168f., and 172ff.; J. Gouillard, *op. cit.*, p. 263; C. Mango, *The Brazen House* (*supra*, note 40) p. 121f.

If the mosaics were executed between 787–815, we would, of course, be faced with the added difficulty of explaining how they managed to survive the second period of Iconoclasm.

churches was limited, and the subject matter restricted to representations far less controversial than the vision depicted at Dereagzi.

In short, the mosaics of the diaconicon must have been completed before the beginning of Iconoclasm in 726 or sometime after the Feast of Orthodoxy in 843.

Of these alternatives, the first can probably be eliminated. During the course of our investigations in 1967 a wooden tie-beam was found preserved *in situ* inside the southwest pier of the narthex gallery.⁴² Two samples were cut from the beam and submitted to the Radiocarbon Laboratory at the University of

⁴² The beam was found resting in the north-south beam-hole of the pier. Much of it had already deteriorated by 1967. Its cross-section then measured 0.14 (width) × 0.10–0.11 (height) m.; its length measured 1.01 m. The wood is cedar of Lebanon (*Cedrus libani*). We are indebted to Mr. B. F. Kukachka of the Forest Products Laboratory of the U.S. Department of Agriculture Forest Service (Madison, Wisconsin) for this identification. On the use of tie-beams at Dereagzi, see H. Rott, *Kleinasiatische Denkmäler aus Pisidien, Pamphylien, Kappadokien und Lykien*, Studien über Christliche Denkmäler, 5–6 (Leipzig, 1908), pp. 310 and 313, and Abb. 112.

Pennsylvania for testing.⁴³ Of these samples, the first (P-1437) proved to be the better specimen. Its radiocarbon date is A.D. 794 ± 44 .⁴⁴

⁴³ We are particularly grateful to Dr. Elizabeth K. Ralph of the Radiocarbon Laboratory for testing our samples and for her advice on technical matters relating to this paper.

⁴⁴ Each sample was selected from the edge of the beam. The first (P-1437), a relatively thin piece, contained primarily outer growth layers. The second (P-1438), a deeper, wedge-shaped piece, appears to have included a greater proportion of the inner-wood of the beam. It tested A.D. 714 ± 44 . The date of each sample was calculated with a half-life of 5568. Each sample was counted three times, and the three runs were statistically consistent. For an introduction to radiocarbon dating and some of the problems raised by the samples from Dereğzi, as well as for additional bibliography, see E. K. Ralph, "Radiocarbon 'Effective' Half-Life for Maya Calendar Correlations," *American Antiquity*, XXVII, No. 2 (1961), p. 229f.; *idem*, "Review of Radiocarbon Dates from Tikal and the Maya Calendar Correlation Problem," *op. cit.*, XXX, No. 4 (1965), p. 421ff.; E. K. Ralph

Allowing for the possibility that this sample (P-1437) may have contained some inner-wood from the beam, we may still conclude that the log was probably cut no earlier than the year 750. If the beam is part of the original fabric of the church, as seems to be the case, it follows that the building was constructed no earlier than the same year. The mosaics, therefore, could not have been executed before the beginning of Iconoclasm in 726.

Thus, we are left with our second alternative. The mosaics of the diaconicon were not executed until sometime after the Feast of Orthodoxy in 843. The church, probably, was constructed at the same time.

The date of the mosaics will be discussed in detail, in the light of other evidence, in the final report. A more precise date and a *terminus ante quem* will be suggested at that time.

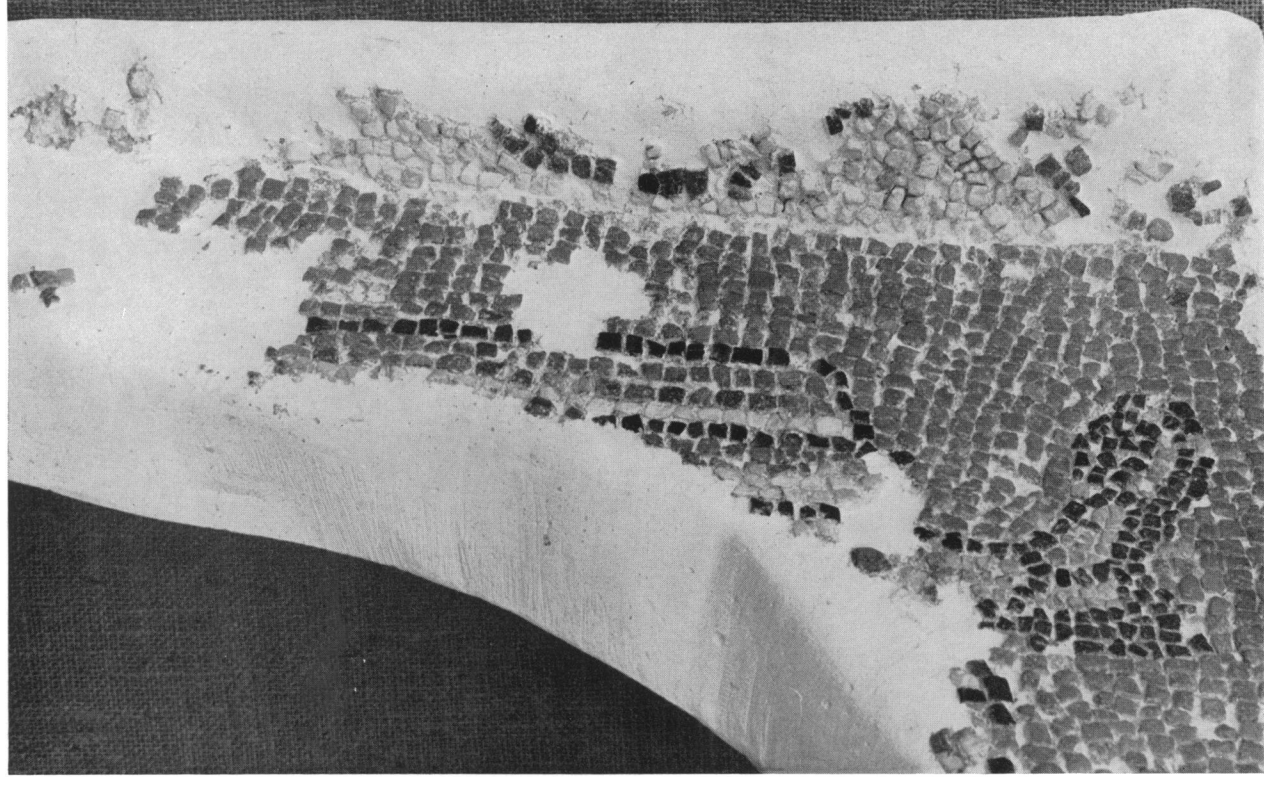
and H. N. Michael, "Problems of the Radiocarbon Calendar," *Archaeometry*, X (1967), p. 3ff.



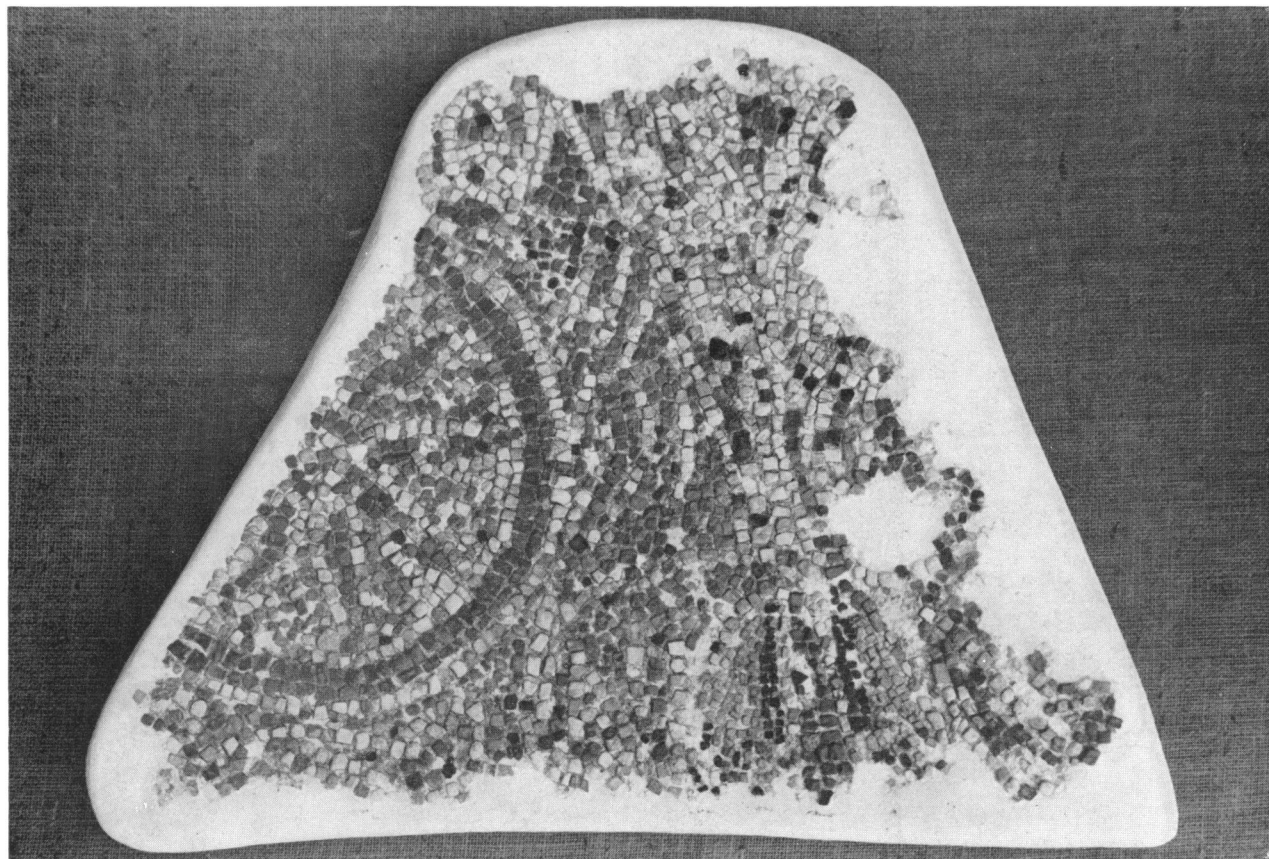
1. Diaconicon, North Wall, looking Northwest. Mosaics before Cleaning



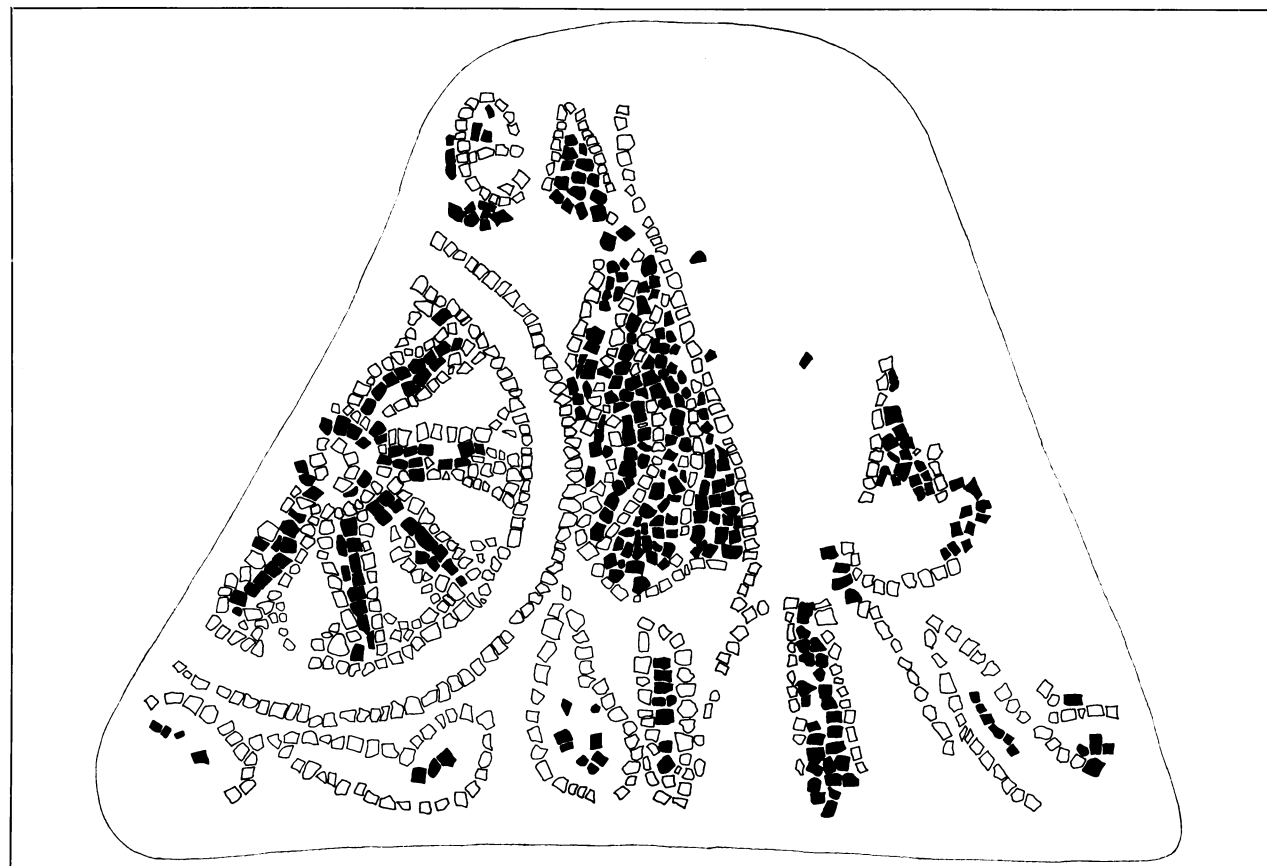
2. Diaconicon, North Wall, looking North. Mosaics before Cleaning



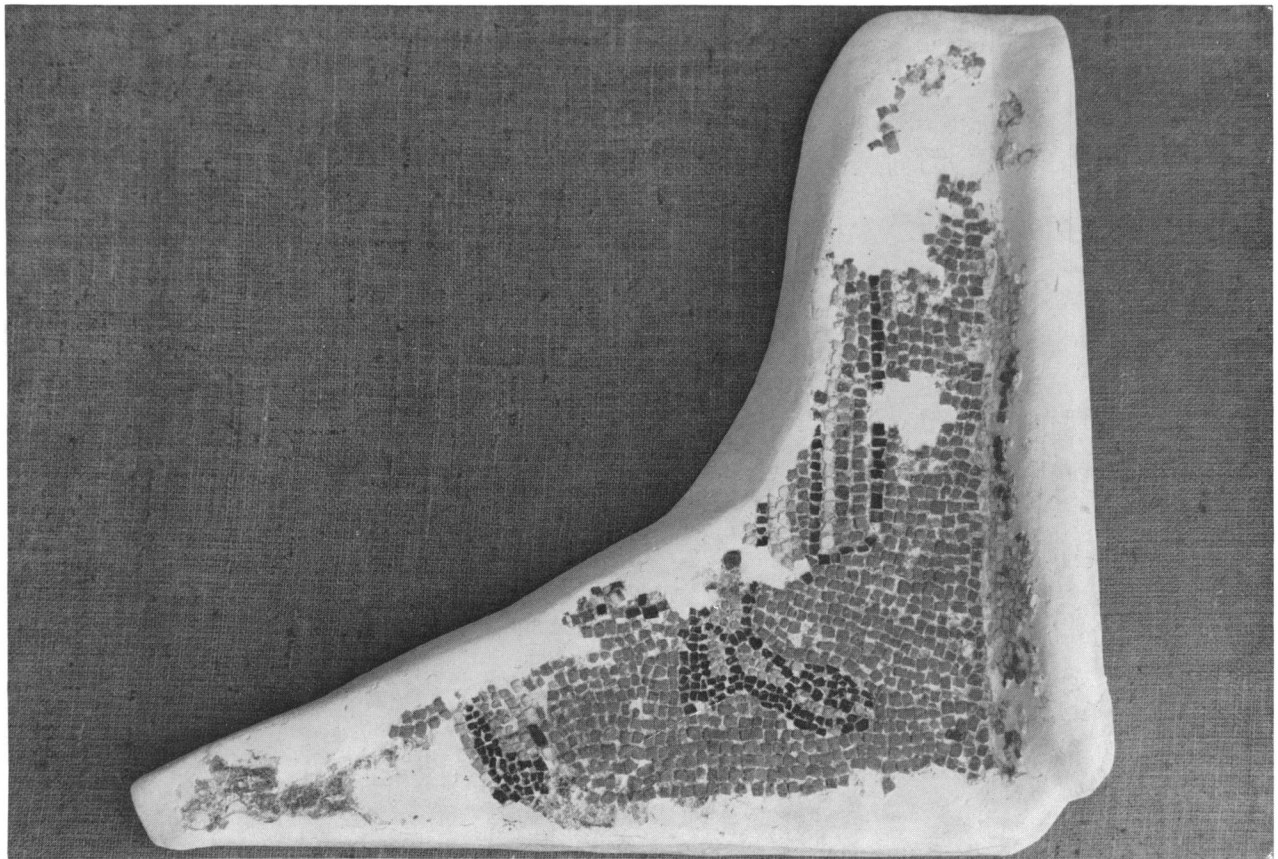
3. Fragment II



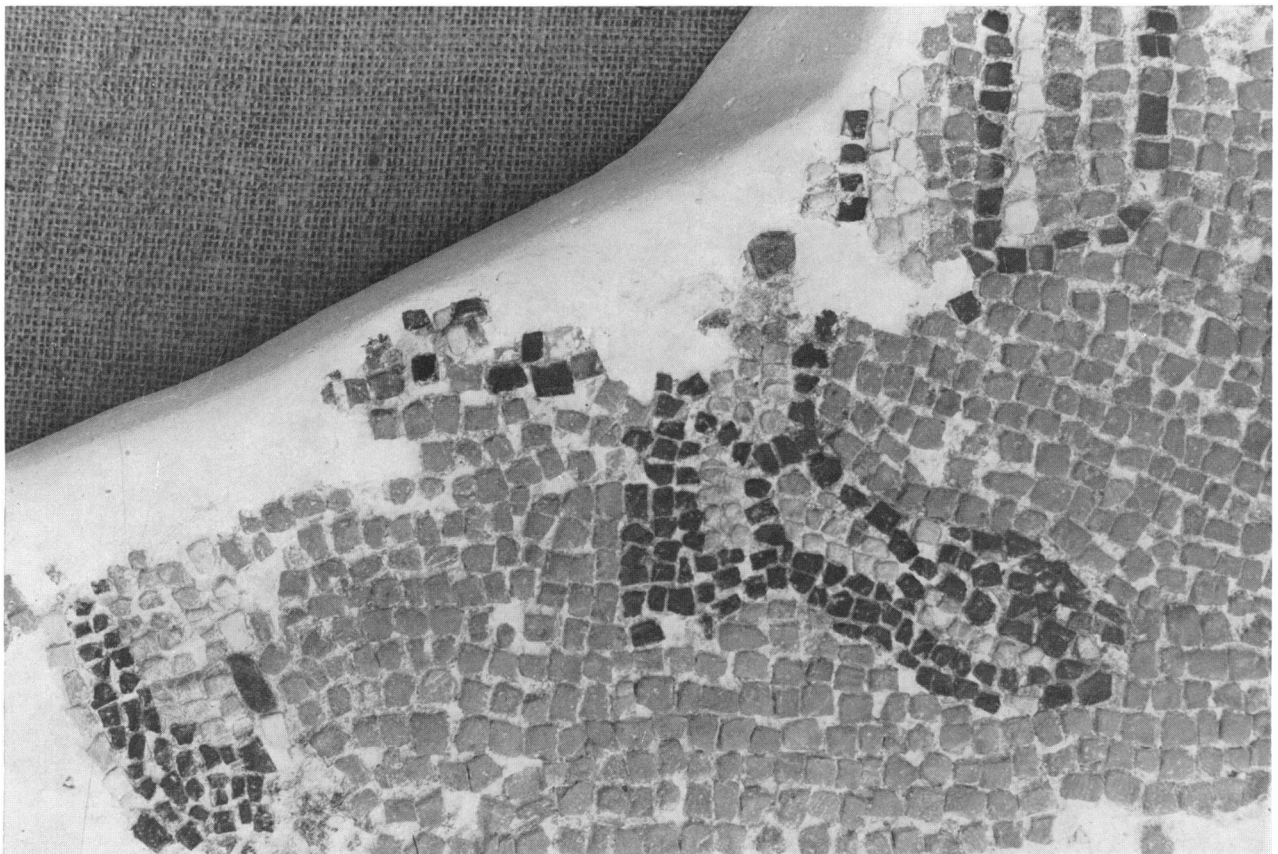
4. Fragment I



5. Fragment I. Dipped Tessarae indicated by Blackened Areas; Outlines of Major Features indicated by Unblackened Tessarae



6. Fragment III



7. Fragment III, Feet of Figure